

4. DISPLAY COMPOSITION AND DISPLAY MEDIUM

PAJ 02-01-01 01033831 JP NDN- 043-0201-4785-2

PATENT APPLICATION NUMBER- 11202301

DATE FILED- 1999-07-15

PUBLICATION NUMBER- 01033831 JP

DOCUMENT TYPE- A

PUBLICATION DATE- 2001-02-09

INTERNATIONAL PATENT CLASS- G02F001167; G09F00937

APPLICANT(S)- RICOH CO LTD

PUBLICATION COUNTRY- Japan

PROBLEM TO BE SOLVED: To obtain an electrophoretic display composition having excellent electrophoretic properties and to obtain an electrophoretic display medium having high contrast and excellent visibility by using an electrophoretic white solid having a water-repellent and oil-repellent surface layer having critical surface tension of a specific value or lower.

SOLUTION: The periphery and inner space between electrodes are divided by a spacer 3 disposed between supporting bodies 1 having electrodes 2, and each divided space is filled with an electrophoretic display composition 4 consisting of an electrophoretic white solid having a water-repellent and oil-repellent surface layer and having (less than)20 dyne/cm critical surface tension on the transparent surface side which is the face to be observed. The water-repellent and oil-repellent surface layer is preferably formed from at least a fluorine-containing polymer. The fluorine atoms present in the fluorine-containing polymer in the layer exhibits the water repellency and oil repellency so that the adsorption of a non-white coloring agent to the surface of the white solid is decreased and changes in the tone of the white solid can be always prevented without depending on each component of the coloring medium.

COPYRIGHT: (C)2001,JPO

Question Number: 1021108.002

File: PAJ

Strategy Date: 09/13/00

NUMBER OF HITS: 4

HIT LIMIT: 100

COPIES: 1